

[illegible]

RESULT 3

JS-09-023-339-3

Sequence 3, Application US/09023339

Patent No. 6127145

GENERAL INFORMATION:

APPLICANT: Sutliff, Thomas D.

APPLICANT: Rodriguez, Raymond L.

TITLE OF INVENTION: Production of '1-Antitrypsin

TITLE OF INVENTION: in plants

```

1  NUMBER OF SEQUENCES: 22
2  CORRESPONDENCE ADDRESS:
3  ADDRESSEE: Dehlinger & Associates
4  STREET: P.O. Box 60850
5  CITY: Palo Alto
6  STATE: CA
7  COUNTRY: USA
8  ZIP: 94306
9  COMPUTER READABLE FORM:
10 MEDIUM TYPE: Diskette
11 COMPUTER: IBM Compatible
12 OPERATING SYSTEM: DOS
13 SOFTWARE: FastSeq for Windows Version 2.0
14 CURRENT APPLICATION DATA:
15 APPLICATION NUMBER: US/09/023,339
16 FILING DATE: 13-FEB-1998
17 PRIOR APPLICATION DATA:
18 APPLICATION NUMBER: 60/037,991
19 FILING DATE: 13-FEB-1997
20 ATTORNEY/AGENT INFORMATION:
21 NAME: Pettibory, Joanne R.
22 REGISTRATION NUMBER: P42,995
23 REFERENCE/DOCKET NUMBER: 0665-0003.30
24 TELECOMMUNICATION INFORMATION:
25 TELEPHONE: 650-324-0880
26 TELEFAX: 650-324-0960
27 INFORMATION FOR SEQ ID NO: 3:
28 SEQUENCE CHARACTERISTICS:
29 LENGTH: 1185 base pairs
30 TYPE: nucleic acid
31 STRANDEDNESS: single
32 TOPOLOGY: linear
33 IMMEDIATE SOURCE:
34 CLONE: codon-optimized AAT coding sequence
35 US-09-023-339-3

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Query Match	41.2%;	Score 628.4;	DB 3;	Length 1185;
Best Local Similarity	70.7%;	Prod. No. 1.6e-153;		
Matches 836;	Conservative	0;	Mismatches 346;	Indels 0; Gaps
QY	12	GAAGACCTCTAAGCGAGCGCGCTCAAAAACCGACACCCAGTCTATCAGNCCNAAGACCA ⁷¹		
DB	1	GAGNACCGCAGGGCGCGCGCCGAGAGACCGACACCCAGCCACCCAGCAGGACCAC ⁶⁰		
QY	72	CCGACTTTTAAATAAAATTTACTCCAAATTTAGCCAAATTTGCTTTTCTTTGTGTATAGACA ¹³¹		
DB	61	CGACGTTCAACAAGATCACCCCGAATTTGGCCGNAATTCGCTTCAGCCTGTATCGCCAG ¹²⁰		
QY	132	TTAGCTCATCAAAAGTAATTTCTACTTAACATTTTTTTTTTTAGTCCCTGTTTCTATTGCCACTGCT ¹⁹¹		
DB	121	CTCGCGCACCAGTCCCAACTCCCAACATCTTCTTCAGCCGGTGAGCATTCGCCACGCC ¹⁸⁰		
QY	192	TTCCGCCATGTTGAGTTTAGTGTACTAAAGCCGATACCCATCACCAGATTTTAAAGAGTTTA ²⁵¹		
DB	181	TTCCGCAATGCTGTCCTCGGTACCAAGCGGACACCCACACGAGATCTCTCAAGGGGTG ²⁴⁰		
QY	252	AACTTTTAAITTGACCGAAATCCAGAAGCCCAAATTCACGAGGGTTTTCAAGAGTTGTG ³¹¹		
DB	241	AACTTCAACTGACGGAGATCCGGAGGCGCAGATCACGAGGGCTTCACGAGGCTGCTC ³⁰⁰		
QY	312	AGAACTTTGAATCAACCTGATTTCTCAATGTCAAATTAATCTACTGGTAAAGGGTTATTTT ³⁷¹		
DB	301	AGGACGCTCAACAGCGGACTTCCAGCTCCAGCTCACCAACCGGCAACGGGCTCTTCCTG ³⁶⁰		
QY	372	TCTGAAGGTTTAAATTTGTTGACAAATTCCTAGAGACGCTCAAGAACTATATCATAGT ⁴³¹		
DB	361	TCCGAGGGCCTCANGCTCGTGTGAATGTTCTTGAGGACGTGAAGAAGCTCTTACCAC ⁴²⁰		
QY	432	GAGCGTTTACCGTTAAITTTTGGTGATACTCAGGAAGCTAAAAAGCAAAATTAATGATTAT ⁴⁹¹		
DB	421	GAGCGCTCACGCTCAACTTCGGGGACACCGAGGACCCAAAGCGAGTCAACGACTAC ⁴⁸⁰		
QY	492	GTTGAGAAAGGCCACCGAGGTAAGATCGTTGAOCTAGTTAAAGAAATTAGATCGTGATACC ⁵⁵¹		

Mon Dec 9 12:50:34 2002

Db 481 CTCGAGAGGGGACCCAGGGCAAGATCGTGAGCTGTCAAGAAATGGACAGGACACC 540
QY 552 GTCCTCCGACAGTAACTATATATTTTTTCAAGGGTAAGTGGGAACGCTCTTTCGAGGTT 611
Db 541 GTCCTCCGCTCGTCACTACATCTTCTCAAGGCAAGTGGAGCGCCGCTTCGAGGTG 600
QY 612 AAAGATCTGAAGAGGAAGATTTTCATGTGTCAAGTTACTACTGTCAAAGTTCCAAATG 671
Db 601 AAGGACACCGAGGAGGAGGACTTCCAGCTGCACCGAGTCCACCGTCAAGGTCGCCGATG 660
QY 672 ATGAAAAGACTGGGTATGTTCAATATTAACATTCGAAAAAATTAAGTTCTTGGGTCTTA 731
Db 661 ATGAAGAGGCTCGGATGTTTCAATCATCAGCACTGCAAGAGCTCTCCAGCTGGGTGCTC 720
QY 732 TTAATGAAGTATTTAGTGAAGCTACTGCTATTTTTTTTTTACCAGAGGAAGGTAAGCTT 791
Db 721 CTCATGAAGTACCTGGGGAACGCCACCCCATCTTCTCTCGCGGAGCGGGCAAGCTC 780
QY 792 CAACATTTAGAGAAATGAGTTGACTCATGACATTTACTATAATTTTATAGAAACGAGGAT 851
Db 781 CAGCACCTGGAGAACGAGTGCAGCACGACATCATCAGAAAGTTCTCTGGAGAACGAGGAC 840
QY 852 CGTCGTAGGCTTCTCTGCACCTGCCAAGTTAAGTATCACCGTACTTACGACTTAAA 911
Db 841 AGCGCTCCGCTAGCTCCACCTCCGAGCTGAGCATCACCGGCACCTAGGACCTGAAG 900
QY 912 TCTGTTTTAGGCGAGTATGATTAAGCAAGTTTCTTAAGGTTGCCGATTTGAGTGTG 971
Db 901 AGCGTCTGGGCGAGTGGGATCATCAGAAAGTCTTTCAGCAAGCGGCGGACCTCTCCGCG 960
QY 972 GTTACTGAAGAGCTCCATTAATAATGAGTAAAGCTGTTCACAAAGCCGCTTAACTATT 1031
Db 961 GTACGAGGAGGAGGCCCCCTCGAGCTCTCCAGGCGGTGCACAAAGCGGTGCTCACGATC 1020
QY 1032 GATGAAAGAGGTACCGAGGCGCGCGGTATGTTCTCTGGAAGCTATTCCATGAGCAAT 1091
Db 1021 GACGAGAGGGGACGAAAGTGGCGGGGCGCATGTTCTCTGGAGGCCATCCCCATGTCCATC 1080
QY 1092 CCACGAGAGTAAATTAATAACCATTCGTTTTTCTGATGATGAGCAGCAACACTAAA 1151
Db 1081 CCGCGCGAGTCAAGTTCAACAAGCCCTTCGTTCTCTGATGATGAGCAGCAACAGGAAG 1140
QY 1152 AGCCCAATGTTTATGGTAAAGTTGTCAACCCCAACTCAGAAG 1193
Db 1141 AGCCCTCTCTCATGGGGAAGGTGCTCAACCCCAAGCAGAAG 1182

RESULT 4
US-09-023-173-5
; Sequence 5, Application US/09023173
; Patent No. 6066781
; GENERAL INFORMATION:
; APPLICANT: Sutliff, Thomas D.
; APPLICANT: Rodriguez, Raymond L.
; TITLE OF INVENTION: Production of Mature Proteins
; TITLE OF INVENTION: In Plants
; NUMBER OF SEQUENCES: 23
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dehlinger & Associates
; STREET: 350 Cambridge Ave., Suite 250
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94306
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/023.173
; FILING DATE: 13-FEB-1998

CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 60/038,168
FILING DATE: 13-FEB-1997
ATTORNEY/AGENT INFORMATION:
NAME: Petitholy, Joanne R
REGISTRATION NUMBER: P42995
REFERENCE/DOCKET NUMBER: 0665-0007.30
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-324-0880
TELEFAX: 650-324-0960
INFORMATION FOR SEQ ID NO: 5:
SEQUENCE CHARACTERISTICS:
LENGTH: 1260 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
CLONE: codon-optimized Ramy3D signal-mature AAT
US-09-023-173-5

Query Match 41.2%; Score 628.4; DB 3; Length 1260;
Best Local Similarity 70.7%; Pred. No. 1.6e-153;
Matches 836; Conservative 0; Mismatches 346; Indels 0; Gaps 0;
QY 12 GAAGACCTCAAGCGACGCGCTCAAAAAACGACACCATCATCACGACCAAGACCAT 71
Db 76 GAGGACCCCGAGGCGACGCGCCGAGAGAGCCAGCAGCAGCAGCAGCAGCAGCAGC 135
QY 72 CCGACTTTTAAATAAATTAATCTCCAAATTTAGCCGAATTTGCTTTTCTTTGTATAGACAA 131
Db 136 CCGAGCTTCAACAAGATCACCCGGAATTTGGCGAATTCGCTTTTACGCTTGTACCGCCAG 195
QY 132 TTAGTCTATCAAGTAAATCTTACTTAACATTTTTTTTATAGTCTCTGTTTCTATTGCCACTGCT 191
Db 196 CTCGCGACCATGCTCCACTCCACCACATCTTCTTACGCGCGGTGAGCATCGCCACCGCC 255
QY 192 TTCGCCATGTTGAGTTAGTACTTAAAGCCGATACCCATGACGAGAGATTTTGAAGGTTTA 251
Db 256 TTCGCCATGTTGCTTCCCTGGGTACCAAGGCGGACACCCACGACGAGATCCTCGAAGGCGTG 315
QY 252 AACTTTAATTTGACGGAATCCAGAGCCCAAAATTCACGAGGTTTTCACAGAGTTGTTG 311
Db 316 AACTTCAACCTGACGAGGATCCCGAGGCGGAGATCCACGAGGCTTCCAGGAGCTGCTC 375
QY 312 AGAATCTTGAATCAACCTGATCTCAATTTGCAATTAATCTGTTAAGCTTTATTTTGG 371
Db 376 AGGAGCTCAACGACGCGGACTCCCGAGCTCCAGCTCAGCAGCGGACCGGCTCTTCTCTG 435
QY 372 TCTGAAGGTTTAAATTTGGTGACAAATTCCTAGAGAGCTCAAGAACTATATCATAGT 431
Db 436 TCCGAGGCGCTCAAGCTCGTCGATTAAGTTCTTGGAGGAGCTGAAGAGCTCTACCACCTCC 495
QY 432 GAGGCTTTTACCGTTAATTTTGGTGATCTAGAGAGCTTAAAGCAATTAATGATTAT 491
Db 496 GAGGCGTTTACCCTCACTTCCGGGACACCGAGGAGGCGCAAGAGCAGATCAACGACTAC 555
QY 492 GTTGAGAAAGGACCCAGGTAAGATCGTTGACCTAGTTTAAAGAAATTAGATCGTGATACC 551
Db 556 GTGAGAAGGGGACCCAGGCAAGATCGTGAGCTTGTCAAGGAATTTGGACAGGGACACC 615
QY 552 GTCTTCGCTAGTTTAACTATATTTTTTCAAGGGTAACTGGGAGAGCTCTTTCGAGGTT 611
Db 616 GTCTTCGCTCGTCACTACATCTTCTTCAAGGGCAAGTGGGAGGCGCCGCTTCGAGGTG 675
QY 612 AAAGATCTGAAGAGGAAGATTTTTCATGTTGATCAAGTTTACTACTGCTCAAGATTCGAATG 671
Db 676 AAGACACCGAGGAGGAGGACTTCCAGCTCGAGCAGCTCACCACCTCAAGGTCGCGATG 735
QY 672 ATGAAAAGACTGGGTATGTTTCAATATTAATTAACATTTCAAAAAATTAAGTTCTTGGGTCTTA 731
Db 736 ATGAAGAGGCTCGGCATGTTTCAACATCCAGCACTGCAAGAAAGCTCTCCAGCTGGGTGCTC 795

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QY 732 TTAAATGAAGTATTAGTAACTGCTACTGCTATTATTTTACCAGCAAGGTAAAGCTT 791
Db 796 CTATGAAGTACTGGGAAAGCCACCGCCATCTTCTCTCCGCGAGGAGGCAAGCTC 855
QY 792 CAACATTTAGAGATGAGTTGACTCATGACATTTATTACTATAATTTTATAGAACAGGAT 851
Db 856 CAGCAGCTGGAGAACGAGCTGACGACGACATCATCAGCAAGTTCTCTGGAGAACAGGAC 915
QY 852 CGTCGTAGCGCTTCTCTGACCTGCCAAAGTTAAGTATCATCCGGTACTTACACATTAATA 911
Db 916 AGCGCTCCGCTAGCTTCCAGCTCCGAAAGCTGAGCATCACCGGACGCTACGACCTGAAG 975
QY 912 TCTGTTTTAGGCGAGTTAGGTATTACCAAGTTTTTTCTAACGGGCGGATTTAGTGGT 971
Db 976 AGCGTCTGGCGAGCTGGGATCAGGAAGTCTTCAAGCAAGCGGCGGACCTCTCCGGC 1035
QY 972 GTTACTGAAGAAGCTCCATTAATAATGAGTAAAGCTGTTCACAAAGCGGCTCTTAAGTATT 1031
Db 1036 GTGACGGAGGAGGCGCCCTGAAGCTCTCAAGGCGGTGCACAAGCGGTGCTCAGATC 1095
QY 1032 GATGAAGAGGTTACGAGGCGCGCGCTATGTTCTCTGGAGCTATTCCATGAGCAATT 1091
Db 1096 GACGAGAGGAGGAGGAGCTGCGGGGCGCATGTTCTCTGGAGGCGCATCCCATGTCCATC 1155
QY 1092 CCACCAAGAGTTAAATTAATAAAGCTTTCGTTTCTGATGATGACGACAGCAACTAAA 1151
Db 1156 CCGCCGAGGTCAAGTTCACAAAGCCCTTCGTTCTCTGATGATGATGATGATGATGATGAT 1215
QY 1152 AGCCCATGTTTATGGTAAAGTTGTCACCAAGCTTCAAGCAACTCAAGAG 1193
Db 1216 AGCCCTCTCTTATGGGAAGGTCGTCAACCCCGGAGAG 1257

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RESULT 5

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US-09-023-339-2
; Sequence 2, Application US/09023339
; Patent No. 612145
; GENERAL INFORMATION:
; APPLICANT: Sutliff, Thomas D.
; APPLICANT: Rodriguez, Raymond L.
; TITLE OF INVENTION: Production of l-Antitrypsin
; TITLE OF INVENTION: In Plants
; NUMBER OF SEQUENCES: 22
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Dehlinger & Associates
; STREET: P.O. Box 60850
; CITY: Palo Alto
; STATE: CA
; COUNTRY: USA
; ZIP: 94306
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette
; COMPUTER: IBM Compatible
; OPERATING SYSTEM: DOS
; SOFTWARE: FastSeq for Windows Version 2.0
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/023.339
; FILING DATE: 13-FEB-1998
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/037,991
; FILING DATE: 13-FEB-1997
; ATTORNEY/AGENT INFORMATION:
; NAME: Petithory, Joanne R
; REGISTRATION NUMBER: P42,995
; REFERENCE/DOCKET NUMBER: 0665-0003.30
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 650-324-0880
; TELEFAX: 650-324-0960
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1185 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single

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; TOPOLOGY: linear
; IMMEDIATE SOURCE:
; CLONE: native AAT coding sequence
US-09-023-339-2

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Query Match 28.1%; Score 429; DB 3: Length 1185;
Best Local Similarity 60.2%; Pred. No. 6.3e-102;
Matches 711; Conservative 0; Mismatches 470; Indels 0; Gaps 0;

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QY 12 GAACACCTCAAGGCGAGCGCTCAAAAACCCGACACCATCATCAGCAGGAGGAT 71
Db 1 GAGATCCCGAGGAGATGCTGCCAGAGACAGATACATCCCACCATGATCAGGATCAC 60
QY 72 CCGACTTTTAAATAAATTTACTTCCAAATTTAGCCGAATTTGCTTTTCTTTATAGACAA 131
Db 61 CCAACCTTCAACAAGATCACCCCAACCTGGCTGAGTTGCTTTTACGCTTATACCGCAG 120
QY 132 TTAGCTCATCAAGTAAATTTCTACTAAATTTTTTTTTAGTCTCTGTTTCTATGCACTGCT 191
Db 121 CTGACACACAGTCCCAACAGCAATATCTTCTTCTCCCACTGAGCATCGCTACAGCC 180
QY 192 TTCGCCATGTTAGCTTTTAGGTACTTAAAGCCGATACCCATGACGAGATTTTATAGAGTTTA 251
Db 181 TTTGCATGCTCTCCCTGGGAGCCAGGCTGACACTCAGATGAAATCTCTGGAGGCGCTG 240
QY 252 AACTTTTAAATTTGACCGAAATCCCAAGAGCCCAATTTCAAGAGGTTTTCAGAGTTGTTG 311
Db 241 AATTTCAACCTCACGGAGATTCGGGAGGCTCAGATCCATCAAGGCTTCCAGGAACTCCTC 300
QY 312 AGACTTTTGAATCAACCTGATTTCTCAATTCGAATTAATTAATTAATTAATTAATTAATTA 371
Db 301 CGTACCCTCAACAGCAGCAGACAGCCAGCTCCAGCTGACCCAGGCAATGGCTTCTTCTC 360
QY 372 TCTGAAGGTTTAAATTTGGTTGACAAATTCCTAGAAGACGCTCAAGAACTATATCATAGT 431
Db 361 AGCGAGGCGCTGAAGCTAGTGGATAGTTTGGAGGATGTTAAAAGTTGTACCACTCA 420
QY 432 GAGGCTTTTACCGTTAAATTTGGTGATCTAGGAGAGCTAAAAGCAAAATTAATGATTAAT 491
Db 421 GAAGCCTTCTACTGTCAACTTTCGGGGACACCGAAGAGGCGCAAGAAACAGATCAACGATTAC 480
QY 492 GTTGAGAAAGCCACCCAGGTAAGATCGTTGACCTAGTTAAAGAAATTAAGTCTGTGATACC 551
Db 481 GTGGAGAAAGGTTACTCAAGGGAATTTGGATTTGGTCAAGGAGCTTGACAGAGACACA 540
QY 552 GTCTTCGCACTAGTTAACTATATTTTTTCAAGGGTAAGTGGGAAGCTCTCTTCGAGGTT 611
Db 541 GTTTTGTCTCTGGTGAATTAATCTTCTTAAAGGCAATGGGAGAGACCCCTTGAAGTC 600
QY 612 AAAGATCTGAAGAGGAGATTTTCAATGTTGATCAAGTTACTACTGTCAAGTTCAATG 671
Db 601 AAGGACACCGAGGAGGAGGACTTCCACGTGGACAGGCTGACCCAGGTTGAGGTCATG 660
QY 672 ATGAAAGAGCTGGGTATGTTCAATATTTCAACATTTGCAAAATTAAGTTCTTGGGCTTA 731
Db 661 ATGAGGTTTAGGCATGTTTAACTCCAGCACTGTAAGAAGCTGTCCAGCTGGGTCGTG 720
QY 732 TTAATGAAGTATTTAGGTAAACGCTACTGCTATTTTTTTTTTACCAGCAAGGTAAGCTT 791
Db 721 CTGATGAATACCTGGCAATGCCACCGCATCTTCTTCTGCTGATCAGGGAACATA 780
QY 792 CAACATTTAGAGAAATGAGTTGACTCATGACATATTACTAAATTTTTTAGAGAACGAGGAT 851
Db 781 CAGCAGCTGGAAATGAACCTACCCACGATATCATCACAAGTTCTCTGGAAATGAAGAC 840
QY 852 CGTCGTAGGCTTCTCTGACACCTGCCAAAGTTAAGTATCACCGGTACTTACGACTTAAA 911
Db 841 AGAAGCTCTGCCAGCTTACATTTACCCAACTGCTCCATTTACTTGGAACTATGATCTGAAG 900
QY 912 TCTGTTTTTAGGCGAGTTAGGTATTTACCAAGTTTTTTTCTAACGGTCCCGATTTGAGTGGT 971
Db 901 AGCGTCTCTGGGTCAACTGGGCATCACTAAGGTTCTTCAAGCAATGGGCTCACCTCTCCGGG 960

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QY	972	GT	TACTGAAGAGCTCCATTTAAATTTGAGTAAGAGCTTTCACAAAGCGGCTCTTA	CTT	TA	CTATT	1031
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QY	1032	GATG	AAAGGGTACCGAGGCGCGCGGCTATGTTCTTGGAAAGCTATCCAAATGAGCAT				1091
Db	1021	GAGG	AAAGGACATGAACTGCTGGGGCCATGTTTTTAGAGGCCATACCCATGCTATC				1080
QY	1092	CCAC	GAGAAGTTTAAATTTAATAAACCATTCTGTTTTCTGATGATCGAGCAGAACATAA				1151
Db	1081	CCCC	CGAGGTCAAGTTCAACAACCCCTTCTGCTTCTTAATGATTGAACAAAATACCAAG				1140
QY	1152	AGCC	ATCTTTATGGGTAAAGTTGTCAACCCAACTCAGAA				1192
Db	1141	TC	TCCCTCTTTCATGGAAAAAGTGTGAATCCCA				1181

RESULT 6

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US-09-299-141-4
; Sequence 4, Application US/09299141
; Patent No. 6461606
; GENERAL INFORMATION:
; APPLICANT: FLOTTE, TERENCE R.
; APPLICANT: SONG, SIHONG
; APPLICANT: BYRNE, BARRY J.
; APPLICANT: MORGAN, MICHAEL
; TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY
; FILE REFERENCE: 4300.011800
; CURRENT APPLICATION NUMBER: US/09/299,141
; CURRENT FILING DATE: 1999-04-23
; EARLIER APPLICATION NUMBER: 60/083,025
; EARLIER FILING DATE: 1998-04-24
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 4
; LENGTH: 5932
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: p43C-AT
US-09-299-141-4

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Query Match 28.1%; Score 429; DB 4; Length 5932;
Best Local Similarity 60.2%; Pred. No. 1.1e-101;
Matches 711: Conservative 0; Mismatches 470; Indels 0; Gaps 0;

Qy	12	GAAGACCTCAAGCGGAGCGCGCTCAAAAACCCGACACCGAGTCATCAGCACCAAGCCAT	71
Db	1385	GAGATCCCGACGGAGATGTCGCCAAGACAGATACATCCACCATGATCAGAGTCAAC	1444
Qy	72	CCGACTTTTAAATAAATTACTCCAAATTTAGCGGAATTTGCTTTTCTTGTATAGACAA	131
Db	1445	CCAACCTTCAACAGAGATCACCCCAACCTGGCTGAGTTCGCCTTCAGCCTATACCGCCAG	1504
Qy	132	TTAGTCTCATCAAGTAGTAATCTACTACAATTTTTTTTAGTCTGTTTCTTATTTGCCACGTGCT	191
Db	1505	CTGCACACCAAGTCCACACACCAATACTCTCTCCCCAGTGAGCATCGCTACAGCC	1564
Qy	192	TTCCGCATGTTGAGTTTAGGTACTAAAGCCGATACCCATGACGAGATTTTATAGAGGTTTA	251
Db	1565	TTTGCAATGCTCTCCCTGGGGACCAAGGCTGACACTACGATGAAATCCTCGAGGGCGTG	1624
Qy	252	AACTTTAAATTGTACCGGAATCCACAGAGCCCAAAATTCACGAGGGTTTTCAAGAGTTGTG	311
Db	1625	AATTCAACCTCAGCGAGATTCCGGAGGCTCAGATCCATGAAGGCTTCCAGGAACCTCCTC	1684
Qy	312	AGAACTTTGAATCAACCTGATTTCTCAATTGCAATTAACCTACTGTGAACGGTTTATTTTG	371
Db	1685	GTACCTTCAACGACGACAGCCAGCTCCAGCTGACCAACCGCAATGGCTGTGTTCCCTC	1744
Qy	372	TCTGAAGGTTTAAATTTGGTTGACAAATTCCTAGAAGCGTCAAGAAACTATATCATAGT	431
Db	1745	AGCAGGSGCCTTGAAGCTAGTGGATTAAGTTTTTGGAGGATGTTTAAAAGATGTGTACCACTCA	1804

PRECISE 7

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US-09-299-141-8
; Sequence 8, Application US/092990141
; Patent No. 6461606
; GENERAL INFORMATION:
; APPLICANT: FLOTTE, TERENCE R.
; APPLICANT: SONG, SIHONG
; APPLICANT: BYRNE, BARRY J.
; APPLICANT: MORGAN, MICHAEL
; TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY
; FILE REFERENCE: 4300.011800
; CURRENT APPLICATION NUMBER: US/09/299,141
; CURRENT FILING DATE: 1999-04-23
; EARLIER APPLICATION NUMBER: 60/083,025
; EARLIER FILING DATE: 1998-04-24
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 8
; LENGTH: 6142

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; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: PLASMID
; OTHER INFORMATION: p43msENC-AT
US-09-299-141-8

Query Match 28.1%; Score 429; DB 4; Length 6142;
Best Local Similarity 60.2%; Pred. No. 1.1e-101;
Matches 711; Conservative 0; Mismatches 470; Indels 0; Gaps 0;

QY 12 GAAGACCCCTAAGGCGACGCGCTCAAAAAACGACACAGTATCATCGACCAAGACCAT 71
DB 1595 GAGGATCCCGAGGAGATGCTGCCAGAGACAGATACATCCCACCATGATCAGGATCAC 1654
QY 72 CCGACTTTTAAATAAATTAACCTCAAAATTAAGCCGAAATTTGCTTTTCTGTATAGACAA 131
DB 1655 CCACCTTCAACAGATACCCCAACCTGGCTGAGTTCCGCTTACGCTATACCGCAG 1714
QY 132 TTAGCTCATCAAGTAATTTCTACTAACATTTTTTTTGTAGTCTGTTTCTATTGCCACGTCT 191
DB 1715 CTGGACACACAGTCCACACAGCAATATCTTCTCCCGAGTGAGCATGCTTACAGCC 1774
QY 192 TTCGCCATGTTGAGTTTAGTACTAAAGCCGATACCCATGACGAGATTTTAGAGGTTTA 251
DB 1775 TTGCAATGCTCTCCCTCGGACCAAGGCTGACACTCAGCATGAAATCCTGGAGGCGCTG 1834
QY 252 AACTTTTAATTTGACCGAAATCCAGAGGCCCAATTTCCAGAGGTTTTCAGAGAGTTGTTG 311
DB 1835 AATTTCAACCTCAGGAGATTCGAGAGGCTCAGATCATGAAGGCTTCCAGGAACTCCTC 1894
QY 312 AGAAGCTTTGAATCAACCTGATTCTCAATTTGCAATTTAACTACTGTGTAACTGTTATTTTG 371
DB 1895 CGTACCTCAACACAGCAGACAGCAGCTCCAGCTGACCCAGGCAATGCTGTTCCCTC 1954
QY 372 TCTGAAGGTTTAAATTTGTTGACAAATTCCTAGAACGCTCAAGAACTATATCATAGT 431
DB 1955 ACCGAGGCTTGAAGTGTGATGATGTTTGGAGGATGTTTAAAGTTGTACCACTCA 2014
QY 432 GAGGCTTTTACCGTTAAATTTTGTGTACTGAGGAGCTAAAAAGCAAAATTAATGATTAT 491
DB 2015 GAAGCTTCACTGTCACTTCCGGGACACAGAGGCCAGAGCCAGATCAACAGATTAC 2074
QY 492 CTGAGAAAGCCACCCAGGTAAGTCTGTTGACCTAGTTAAAGAAATTAGATCGTGATACC 551
DB 2075 GTGGAGAGGTTACTCAAGGGAATTTGGGATTTGTTCAAGGAGCTTGACAGACACA 2134
QY 552 CTCTTCGCACTAGTTAACTATATTTTTCAGGAGTAAGTGGCAAGCTCTTTCAGGTT 611
DB 2135 GTTTTTCGCTGTGTAATACATCTCTTTTAAAGGCAATGGGAGAGACCTTTGAAGTC 2194
QY 612 AAAGATCTGAGAGGAAGATTTTCAATGTTGATCAAGTTACTACTGTCAAAGTTCCAAATG 671
DB 2195 AAGACACCCGAGGAGGAGGACTTCCAGCTGGACAGGCTGACCAAGCTGAAGTGGCTATG 2254
QY 672 ATGAAAAGACTGGGTATGTTCAATATATCAACATATGCAAAATTAAGTTCTTGGGTCTTA 731
DB 2255 ATGAAGGTTTAGCATGTTTACATCCAGCACTGTGAAGAGCTGTCCAGCTGGGCTGTG 2314
QY 732 TTAATGAAGTATTAGGTAAAGCTACTGCTATTTTTTTTTTACCAGACGAAGTAAAGTT 791
DB 2315 CTGATGAATACCTGGGCAATGCCACCGCATCTCTTCTCCCTGATGAGGGGAACATA 2374
QY 792 CAACATTTAGAGATGAGTTGATCATGATCATTTTACTAAATTTTAGAGAACAGGAT 851
DB 2375 CAGCACTGGAAATGAATCAACCCAGCATATCATCAACCAAGTTCTCTGGAAATGAAC 2434
QY 852 CGTCGTAGCGCTTCTCTGCACTGCCAAAGTTAAGTATCACCGGTAATTTAGACTTAAA 911
DB 2435 AGAAGGCTGCCAGCTTACATTTACCAAACTGTCATTTAGGAACTATGATCTGAAG 2494
QY 912 TCTGTTTTAGGCGCAGTTAGTATTTACCAAGTTTTTTTCTAACGGTGGCGGATTTGAGTGT 971

DB 2495 ACGTCTCTGGGTCAACTGGGSCATCACTAAGGTCTTTTCAGCAATGGGGCTGACCTCTCCGGG 2554
QY 972 GTTACTGAAGAAGCTCCATTAAAAATTTAGTAAAGCTGTTCAAAAGCGCTCTTAACATATT 1031
DB 2555 GTACAGAGAGGAGCCACCTCGAGCTCTCAAGGCGGTGCATAGGCTGTCTGCTGACCATC 2614
QY 1032 GATGAAAAGGTTACCGAGGCGCGCGCTATGTTCTCTGGAAGCTATTTCCAATGAGCATTT 1091
DB 2615 GACGAAAAGGCTGAAGCTGCTGGGCCATGTTTTTTAGAGGCCATACCATGCTCTATC 2674
QY 1092 CCACAGAGAGTTAAATTTAATAAACCAATTCGTTTTTCTGTATGATCGAGCAGAACACTAAA 1151
DB 2675 CCCCCGAGGTCAAGTTTCAACAAACCCCTTGTCTTCTTAATGATTGAACAAAATACCAAG 2734
QY 1152 AGCCCATTTTATGGGTAAAGTTGTCAACCCAACTCAGAA 1192
DB 2735 TCTCCCTCTTCATGGGAAAGTGGTGAATCCACCCAAAA 2775

RESULT 8

US-09-299-141-1

; Sequence 1, Application US/09299141

; Patent No. 6461606

; GENERAL INFORMATION:

; APPLICANT: FLOTTE, TERENCE R.

; APPLICANT: SONG, SIHONG

; APPLICANT: BYRNE, BARRY J.

; APPLICANT: MORGAN, MICHAEL

; TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY

; CURRENT APPLICATION NUMBER: US/09/299,141

; CURRENT FILING DATE: 1999-04-23

; EARLIER APPLICATION NUMBER: 60/083,025

; EARLIER FILING DATE: 1998-04-24

; NUMBER OF SEQ ID NOS: 13

; SOFTWARE: PatentIn Ver. 2.0

; SEQ ID NO 1

; LENGTH: 6565

; TYPE: DNA

; ORGANISM: Artificial Sequence

; FEATURE:

; OTHER INFORMATION: Description of Artificial Sequence: PLASMID C-AT

US-09-299-141-1

Query Match 28.1%; Score 429; DB 4; Length 6565;
Best Local Similarity 60.2%; Pred. No. 1.1e-101;
Matches 711; Conservative 0; Mismatches 470; Indels 0; Gaps 0;

QY 12 GAAGACCCCTCAAGGCGACGCGCTCAAAAAACGACACAGTATCATCGACCAAGACCAT 71
DB 944 GAGGATCCCGAGGAGATGCTGCCAGAGACAGATACATCCCAATGATCAGGATCAC 1003
QY 72 CCGACTTTTAAATAAATTTACTCCAAATTTAGCCGAATTTGCTTTTCTTTGTATAGACAA 131
DB 1004 CCAACCTTCAACAGATCACCCCAACCTCGGCTGAGTTCCGCTTCAGCCTATACGCCAG 1063
QY 132 TTAGCTCATCAAGTAATTTCTACTAATTTTCTTTAGTCTCTTTCTTTAGTCCACTGCT 191
DB 1064 CTGGCACACAGTCCCAACAGCAGCAATATCTTCTTCTCCCAAGTGAAGTCAAGCC 1123
QY 192 TTGCCATGTTGAGTTTAGTACTTAAAGCCGATACCCATGACGAGATTTTGAAGGTTTA 251
DB 1124 TTTGCAATGCTCTCCCTGGGACCAAGGCTGACACTCAGATGAATCCTGGAGGCGCTG 1193
QY 252 AACTTTTAAATTTGACCAATTTCCAGAGCCCAATTTACAGAGGTTTTTCAAGAGTTGTTG 311
DB 1184 AATTTCAACTCAGGAGATTCGGAGGCTCAGATCCATGAAGGCTTCCAGGAACCTCCTC 1243
QY 312 AGAAGTTTGAATCAAGCTGATTTCTCAATTTGCAATTAACCTACTGTTAAACGTTTTTATTTG 371
DB 1244 CGTACCTCAACCGACCAAGCAGCAGCTCCAGCTGACACCGGCAATGGGCTGTTCTC 1303
QY 372 TCTGAAGGTTTAAATTTGTTGACAAATTTCTTGAAGACGCTCAAGAAACTATATCATAGT 431

Mon Dec 9 12:50:34 2002

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; SEQ ID NO 6
; LENGTH: 6714
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: PLASMID
; OTHER INFORMATION: p43CB-AT
US-09-299-141-6

Query Match      28.1%; Score 429; DB 4; Length 6714;
Best Local Similarity 60.2%; Pred. No. 1.1e-101;
Matches 711; Conservative 0; Mismatches 470; Indels 0; Gaps 0;

QY 12 GAAGACCCCTCAAGGCGACCGCTCAAAAACCGACACACGATCATCAGACCAACACCAT 71
Db 2167 GAGGATCCCGAGGAGATGCTGCCAGAGACAGATACATCCACCATGATCAGGATCAC 2226
QY 72 CGGACCTTTAATAAATAATCTCCAAATTTAGCGGAATTTGCTTTTCTTTGATAGACAA 131
Db 2227 CCAACCTTCAACAAGATCACCCCAACCTGGCTGAGTTGCGCTTACGCCATATACCGCCAG 2286
QY 132 TTAGCTCATCAAGTAATTTCTACTAATTTTCTTTAGTCTCTTTTCTATTGCCACTGCT 191
Db 2287 CTGGCACACGACGTCCTCCCTGGGGACCAAGGCTGACACTCAGATGAAATCTGGAGGCGCTG 2406
QY 192 TTCCGCTATGTGAGTTAGGTACTAAAGCCGATACCCATCAGACGATTTTAGAGGTTTA 251
Db 2347 TTTGCAATGCTCTCCCTGGGGACCAAGGCTGACACTCAGATGAAATCTGGAGGCGCTG 2406
QY 252 AACTTTTAATTTGACCGGAATCCCGAAGCCCAATTCAGAGGCTTTTCAAGAGTTGTTG 311
Db 2407 AATTTCAACCTCAGGAGATTCGGGAGCTCAGATCCATGAGGCTTCCAGGAACTCCCTC 2466
QY 312 AGACTTTGATCAACCTGATTTCTCAATTTGCAATTTACTACTGTTAAGGTTTATTTTG 371
Db 2467 CGTACCTCAACCGAGGCTGACGACGCTCCAGCTGACACCGCAATGCGCTGCTCCTC 2526
QY 372 TCTGAAGGTTTAAATTTGGTTGACAAATTCCTAGAACGCTCAAGAACTATATCATAGT 431
Db 2527 AGCGAGGCGCTGAAGTAGTGGATAAGTTTGGAGGATGTTTAAAGATTTGTACCACTCA 2586
QY 432 GAGGCTTTTACCGTTAATTTTGGTGATCTAGGAAAGCTTAAAGCAAAATTAATGATTAT 491
Db 2587 GAAGCCTTCACTGTCACTTCGCGGACACCCAGAGCCCAAGAGCCCAAGAGATCAACGATTAC 2646
QY 492 GTTGAAAGGACACCCAGGCTAAGATCGTTCACCTAGTTTAAAGAAATTTAGATCGTATACC 551
Db 2647 GTGGAGAGGCTACTCAAGGGGAAATTTGATTTGGTCAAGGAGCTTGACAGAGACACA 2706
QY 552 GTCTTCGCACTAGTTAATATATTTTTCAGGTTAAGTGGGACGCTCTTCGAGGTT 611
Db 2707 GTTTTGTCTGTTGATTTACATCTTCTTAAAGGCAATGCCACCGCATCTCTTCTGAGTC 2766
QY 612 AAAGATCTGAGAGGAAAGATTTTTCATGTTGATCAAGTTACTACTGTCAAAAGTTCCAAATG 671
Db 2767 AAGGACACCGGAGGAGGACTTCCAGCTGAGGAGCTGACCCAGGAGTCCAGCTGAGGCTATG 2826
QY 672 ATGAAAGAGCTGGGTATGTTCAATATTTCAACATTCGAAATAATTAAGTTCTTGGGCTTTA 731
Db 2827 ATGAAGCGTTTAGGCATGTTTAAACATCCAGCATCTGTAAGAAGCTGCCAGCTGGGTGCTG 2886
QY 732 TTAATGAAGTATTAGGTAAACGCTACTGCTATTTTCTTTTACCAGAGGAAAGTAAAGCTT 791
Db 2887 CTGATGAAATACCTGGGCAATGCCACCGCATCTCTTCTCTGCTGATGAGGAGAACTA 2946
QY 792 CAACATTTAGAGAAATGAGTTGACTCATGATATTTACTATAATTTTAGAGAACGAGGAT 851
Db 2947 CAGCACTGGAAATGAATCACTCACCAGCATATCATCACCAGGTTCTCTGGAATGAAGAC 3006
QY 852 CGTCGTAGCGCTTCTCTGACACCTGCCAAAGTTAAGTATCACCAGGTTACTACGACTTAAA 911
Db 3007 AGAAGGCTGCCAGCTTACATTTTACCCAAACTGTCCTTACTGGAACCTATGATCTGAAG 3066
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RESULT 9
US-09-299-141-6
; Sequence 6, Application US/09299141
; Patent No. 6461606
; GENERAL INFORMATION:
; APPLICANT: FLOTTE, TERENCE R.
; APPLICANT: SONG, SIHONG
; APPLICANT: BYRNE, BARRY J.
; APPLICANT: MORGAN, MICHAEL
; TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY
; FILE REFERENCE: 4300.011800
; CURRENT APPLICATION NUMBER: US/09/299,141
; CURRENT FILING DATE: 1999-04-23
; EARLIER APPLICATION NUMBER: 60/083,025
; EARLIER FILING DATE: 1998-04-24
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
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[illegible]

QY 312 AGAATCTTGAATCAACCTGATCTCAATTCGAATTAACCTACTGGTAACGGTTATTTTGG 371
Db 2677 CGTACCTCAACCGCAGACAGCCAGCTCCAGCTGACCAACCGCAATGGCTGTCTTC 2736
QY 372 TCTGAAGGTTTAAATTTGGTTGACAAATTCCTAGAGAGCTCAAGAAATATATATAGT 431
Db 2737 AGCGAGGCTGAAGCTAGTGGATAAGTTTTTGGAGGATGTTAAAGTTGTACCACTCA 2796
QY 432 GAGGCTTTTACCGTTAAATTTTGGTGNACTAGGAGGCTAAAGCAATTAATGATTAT 491
Db 2797 GAAGCTTTCACCTGCTCACTTCGGGACACCGAGAGGCCAAGAAACAGATCAACGATTAC 2856
QY 492 GTTGAGAAAGGACCCAGGCTGAAGTTCGTGACCTAGTTTAAAGAAATAGATCGTATACC 551
Db 2857 GTGGAGAGGCTACTCAAGGGAAATTCGTGATTTGGTCAAGGAGCTTGACAGACACA 2916
QY 552 GTCCTCGCACTAGTTAACTATATTTTTTCAAGGGTAAGTGGGAACGTCCTTTCCAGATT 611
Db 2917 GTTTTGGCTCTGGTGAATTTACATCTCTTTAAAGGCAATGGGAGAGACCCCTTTGAAGTC 2976
QY 612 AAAGTACTGAAGAGAGAGATTTTCAATATTCACATATTCACAAATTTAAAGTTTCCAATG 671
Db 2977 AAGGACCGAGAGAGGACTTCCAGCTGGACCAAGGTGACCAAGGCTGAAGGAGGCTATG 3036
QY 672 ATGAAGAGCTGGGTATGTTTCAATATTCACATATTCACAAATTTAAAGTTTCTTGGGCTTA 731
Db 3037 ATGAAGCGTTTAAAGGCTGTTTAAACATCCAGCACTGTAAGAGGCTGTCACAGCTGGGCTG 3096
QY 732 TTAATGAAGTATTAAGTAAAGCTACTCTCTATTTTTTTTACAGAGAGGTAAGGTT 791
Db 3097 CTGATGAATACCTGGGCAATGCCACCGCATCTCTTCTTCCGCTGATGAGGGGAACTA 3156
QY 792 CAACATTTAGAGATGAGTGTACTCATGACATTTACTATAATTTTAAAGAAATGAAGAC 851
Db 3157 GAGCAGCTGGAATTAAGTCAACCAAGCATATCATCACCAGTTTCTCGGAAATGAAGAC 3216
QY 852 CGTCTAGCGCTTCTCGACCTGCGCAAGTTAAGTATFACCGGTACTTTAGGACTTAAAT 911
Db 3217 AGAGGCTGCGCAGCTTACATTTACCAAACTGTCCATTAAGTGAACCTATGATCTGAAG 3276
QY 912 TCTGTTTGAAGGCTAGTATAGTATTAACCAAGTTTCTTCAAGGCTGGGATTTAGTGGT 971
Db 3277 AGCGTCTGGTCAACTGGGCTACATAGGCTCTTCAAGGCTGGGCTGACCTCTCGGG 3336
QY 972 GTTACTGAAGAGTCCATTTAAATTTGAGTAAAGCTGTTCACAAAGCGCTCTTAACATT 1031
Db 3337 GTCACAGAGGAGGACCCCTGAAGCTCTCCAAGCGCTGATAGGCTGTGCTGACCACTC 3396
QY 1032 GATGAAGAGGCTACGAGGCGCGCGGCTATGTTTCTGGAAGCTATTCCAATGAGGATT 1091
Db 3397 GACGAGAAAGGAGTGAAGCTGTGGGGCCATGTTTTTAGAGGCCATACCCATGCTATC 3456
QY 1092 CCACGAGAGTTAAATTTAAATTAACCAATTTGTTTTCTGATGTCGAGCAGACACTAAA 1151
Db 3457 CCCCCGAGGCTCAAGTTCAACAAACCTTTGCTCTTAAATGATTGAACAAAATACCAAG 3516
QY 1152 AGCCCATGTTTATGGGTAGGTTGTCAACCCCAACTCAGAA 1192
Db 3517 TCTCCCTCTTCATGGGAAAGTGTGAATCCCAACCCCAAA 3557

RESULT 13

US-09-299-141-7

; Sequence 7, Application US/09299141

; Patent No. 6461606

; GENERAL INFORMATION:

; APPLICANT: FLOTTE, TERENCE R.

; APPLICANT: SONG, SIHONG

; APPLICANT: BYRNE, BARRY J.

; APPLICANT: MORGAN, MICHAEL

; TITLE OF INVENTION: MATERIALS AND METHODS FOR GENE THERAPY

; FILE REFERENCE: 4300.011800

; CURRENT APPLICATION NUMBER: US/09/299,141
; CURRENT FILING DATE: 1999-04-23
; EARLIER APPLICATION NUMBER: 60/083,025
; EARLIER FILING DATE: 1998-04-24
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn ver. 2.0
; SEQ ID NO 7
; LENGTH: 6981
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Description of Artificial Sequence: PLASMID C-AT2
US-09-299-141-7

Query Match 28.1%; Score 429; DB 4; Length 6981;

Best Local Similarity 60.2%; Pred. No. 11e-101;

Matches 711; Conservative 0; Mismatches 470; Indels 0; Gaps 0;

QY 12 GAAGACCTCAAGCGGAGCGGCTCAAAAACCGACACCAAGTATCATACGACCAAGACCAT 71
Db 165 GAGATCCCCAGGAGATGCTGCCAGAGACAGATACATCCCACCATGATCAGGATCAC 224
QY 72 CCGACTTTTAAATAAAATTTACTCCAAATTTAGCCGAATTTTCTTTTGTATAGACAA 131
Db 225 CCAACCTTCAACAGATCACCCCACTGGCTGAGTTCGCCCTTCAGCCTTATACCGCCAG 284
QY 132 TTAGCTCATCAAGTAAATCTACTTAACATTTTTTTTAGTCTCTTTCTATTGCGACTGCT 191
Db 285 CTGSCACACAGTCCAAACAGCACAATATCTTCTTCTCCCACTGAGCATCGCTACAGCC 344
QY 192 TTGCGCATTTGAGTTTGGTACTTAAAGCGATACCCATGACGAGATTTTAGAAGGTTTA 251
Db 345 TTTGCAATGCTCTCCCTGGGGACCAAGGCTGACACTCACGATGAAATCTCTGGAGGCTG 404
QY 252 AACTTTAAATTTGACGAAATCCCAAGAGCCCAATTTTCAAGAGTTTGTG 311
Db 405 AATTTCAACCTCAGGAGATTCGAGGCTCAGATCCATGGAAGGCTTCAGGACTCTC 464
QY 312 AGAATTTGAATCAACCTGATTTCTCAATTTGAATTAACCTACTGGTAAACGGTTTATTTT 371
Db 465 CGTACCTCAACAGCAGCAGCAGCAGCTCCAGCTGACCAACCGCAATGGCTTGTCTC 524
QY 372 TCTGAAGGTTTAAATTTGGTTGACAAATCTTAGAGAGCTCAAGAACTATATCATAGT 431
Db 525 AGCGAGGCTGAAGCTAGTGATAAGTTTTTGGAGGATGTTTAAAGGTTGTACCACTCA 584
QY 432 GAGGCTTTTACCGTTAAATTTTGGTGTACTGAGGAGCTTAAAGCAATTAATGATTAT 491
Db 585 GAAGCCTTCACTGTCACTTCGAGGACACCGAAGAGGCCCAAGAACAGATCAACGATTAC 644
QY 492 GTTGAGAAAGGACCCAGGCTAGATCTGTGACCTAGTTTAAAGAAATAGATCGTATACC 551
Db 645 GTGAGAGAGGCTACTCAAGGGAATTTGGGATTTTGGTCAAGGAGGCTTGACAGACACA 704
QY 552 GTCTTCGCACTAGTTAACTATATTTTTTCAAGGGTAAAGTGGGAAGCTCTCTTCGAGTT 611
Db 705 GTTTTGGCTCTGGTGAATTTACATCTCTTTAAAGGCAATGGAGAGACCCCTTGAAGTC 764
QY 612 AAAGTACTGAAGAGAGATTTTCAATGTTGATCAAGTACTGCTCAAGTTTCAAGTTCCAAATG 671
Db 765 AAGGACCCGAGGAGGACTTCCAGCTGGACAGGTCACCACTGAGGTCGCTATG 824
QY 672 ATGAAAGACTGGTATGTTCAATATTCACATTTCAAAAAATTAAGTTCTTTGGTCTTA 731
Db 825 ATGAAGGCTTTAGGATGTTTAAACATCCAGCACTGTAAGAGGCTCTCCAGCTGGGTGCTG 884
QY 732 TTAATGAGTATTTAGGTAACGCTACTGCTATTTTTTTTTTACAGAGCAAGGTAAGCTT 791
Db 885 CTGATGAATACCTGGCAATGCCACCGCATCTTCTTCTCCCTGATGAGGGGAACTA 944
QY 792 CAACATTTAGAGAAATGAGTTGACTCATGACATTTACTTAATTTTATAGAACAGGAT 851
Db 945 CAGCACCTGGAAATGAATCACTACCCACGATATCATCACCAAGTTCTCTGAAAAATGAAGAC 1004

FILE REFERENCE: 4300.011800
CURRENT APPLICATION NUMBER: US/09/299,141
CURRENT FILING DATE: 1999-04-23
EARLIER APPLICATION NUMBER: 60/089,025
EARLIER FILING DATE: 1998-04-24
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 2
LENGTH: 7405
TYPE: DNA
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: PLASMID E-AT
US-09-299-141-2

Query Match 28.1%; Score 429; DB 4; Length 7405;
Best Local Similarity 60.2%; Pred. No. 1.1e-101;
Matches 711; Conservative 0; Mismatches 470; Indels 0; Gaps 0;

QY 12 GAAGACCCCTCAAGCGACGCGCTCAAAAACCGACACCCAGTCATCACACCAAGACCAT 71
DB 1784 GAGGATCCCGAGGAGATGCTGCCAGAGACAGATACATCCACCCTGATCAGGATCAC 1843
QY 72 CCCACITTTAATAAAATTTACTCCAAATTTAGCCGAATTTGCTTTTCTTTGTATAGACAA 131
DB 1844 CCAACCTTCAACAAGATCACCCCAACCTGGCTGAGTTCCGCTTCCAGCCTATACCCGAC 1903
QY 132 TTAGCTCATCAAGATTAATTTCTACTACATTTTCTTTAGTCCCTGTTCTTATGCCACTGCT 191
DB 1904 CTGGCACACGATCCCAACAGCACCAATATCTTCTTCCCACTGAGCATCGCTACAGCC 1963
QY 192 TTGGCCATGTTGAGTTTAGTACTAAAGCCGATACCCATGACGAGATTTTGAAGGTTTA 251
DB 1964 TTGCAATGCTCTCCCTGGGACCAAGGCTGACATCAGATGAAATCCCTGGAGGGCGTG 2023
QY 252 AACTTTAATTTGACCGAATTTCCAGAGCCCAATTTCCAGAGGGTTTTCAGAGTTGTTG 311
DB 2024 AATTTCAACCTCACGGAGATTTCCGAGGCTCAGATCCATGAGGCTTCCAGGAACCTCCTC 2083
QY 312 AGAATCTTTGAATCAACCTGATTTCTCAATTTGCAATTTAACTACTGTTAAAGGTTTATTTT 371
DB 2084 CGTACCTCAACCCAGCAGACAGCCAGCTCCAGTCCAGTCCAGCCGCAATGGGCTGTTCCTC 2143
QY 372 TCTGAAGGTTTAAATTTGGTTGACAAATTTCTAGAGAGCTCAAGAACTATATCATAGT 431
DB 2144 AGCGAGGCGCTGAAGCTAGTGGATTAAGTTTGGAGGATTTAAAGAGTTGTACCACTCA 2203
QY 432 GAGGCTTTTACCGTTAATTTTGGTGATCTGAGGAGCTAAGAGCAATTAAGATGATTAAT 491
DB 2204 GAAGCTTCACTGCTCACTTCGGGACACCCAGAGGCCAAGAACAGATCAAGGATTAAC 2263
QY 492 GTTGAGAAAGGACCCAGGGTAAAGATCGTTGACCTAGTTAAAGAAATTAGATCGTGATACC 551
DB 2264 GTTGAGAAAGGTTACTCAAGGGAATTTGCTGATTTGGTCAAGGAGCTTGACAGAGACACA 2323
QY 552 GTCTTCGCACTAGTTAACTATATTTTTCAGGGTAAAGTGGGACCGTCTTCAGAGTT 611
DB 2324 GTTTTGTCTGGTGAATTTATCTTCTTTAAAGGCAATTTGGAGAGACCCCTTTGAAATC 2383
QY 612 AAAGATCTGAAGAGGAGATTTTTCATGTTGATCAAGTTACTACTGTCAAGATTTCCAATG 671
DB 2384 AAGGACCCGAGGAGAGGACTTCCAGTGGACCGGTGACCCAGCCGTAAGGTTGCCCTATG 2443
QY 672 ATGAAGACTGGGTATGTTCAATATTCAACATTTGCAAAAATTTAAGTTCTTGGGTCTTA 731
DB 2444 ATGAAGCGTTTAGGCATGTTTAAACATCCAGCAGTGAAGAGCTGTCCAGCTGGGTCTG 2503
QY 732 TTAATGAAGTATTTAGGTAAAGCTACTGCTATTTTTCAGCAGAGGTAAGCTT 791
DB 2504 CTGATGAATACCTGGGCAATGCCACCGCCATCTTCTCTGCTGATGAGGGAACTA 2563
QY 792 CAACATTTAGAGATGATGTTGACTCATGACATTTATTAATTTTATAGAGAACGAGAT 851

DB 2564 CAGCACCTGGAATAATGAACCTCACCCACGATATCATCACCAAGTTCTCTGGAATAATGAAGAC 2623
QY 852 CGTCTAGCGCTTCTCTGCACCTGCCAAGTTAAGTATATCACCGGTACTTAGACTTAAAA 911
DB 2624 AGAAGGCTCGCAGCTTACATTTACCCAAACTGTCCATTTACTTGAACCTATGATCTGAAG 2683
QY 912 TCTGTTTTAGGCCAGTTAGGTATTACCAAAAGTTTTTTCTAAGCGTGGCGATTTGAGTGGT 971
DB 2684 AGCGTCTCTGGGTCAACTGGGCATCACTAAGGTCTTTCAGCAATGGGCTGACCTCTCCGGG 2743
QY 972 GTTACTGAAGAAGCTCCATTTAAATTTGAGTAAAGCTGTTCACAAAGCCGTCTTAACTATT 1031
DB 2744 GTCACAGAGGAGGCCACCCCTGAAAGCTCTCCAAGGCCGTGCATAAGGCTGTGCTGACCATC 2803
QY 1032 GATGAAAAAGGTTACCGAGGCGCGCGCTATGTTCTCTGGAAGCTATTTCCCAATGAGCAT 1091
DB 2804 GACGAGAAAGGACTGGAAGCTGCTGGGGCCATGTTTTTAGAGGCCATACCCCATGTCTATC 2863
QY 1092 CCACGAGAAAGTTAAATTTTAAATTAACCAATTCGTTTTCTGTATGATCGAGCAGAACTAAA 1151
DB 2864 CCCCCGAGGTCAAGTTTCAACAAACCCCTTTGCTTCTTTAATGATTGAACAAATATCCNAG 2923
QY 1152 AGCCCATTTTATGGGTAAAGTTTGTCAACCCCAACTCAGAA 1192
DB 2924 TCTCCCTCTTCAATGGGAAAAAGTGTGAATCCCAACCCCAAAA 2964

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Job time : 87.5 secs

